Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-07-30
Investment Auto Submission Date: 2012-02-28
Date of Last Investment Detail Update: 2012-02-28
Date of Last Exhibit 300A Update: 2012-06-29
Date of Last Revision: 2012-08-16

Agency: 006 - Department of Commerce **Bureau:** 48 - National Oceanic and Atmospheric Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: NOAA/NESDIS/ GOES-R Series Ground Segment

2. Unique Investment Identifier (UII): 006-000321500

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

This investment addresses only the Ground Segment portion of the overall four satellite Geostationary Operational Environmental Satellite - Series R system (GOES-R/S/T/U). The IT elements consist of the antennas, hardware, software, and commercial-off-the-shelf (COTS)/non developmental item (NDI) components used to provide the mission management functionality (mission scheduling, satellite/instrument operations), product generation functionality (processing raw data to navigated and calibrated products, generation of data for rebroadcast and for higher level product creation), product distribution functionality (distribution of navigated and calibrated products, GOES Rebroadcast data, and derived products to user portals), enterprise management (health and configuration status for the entire GOES-R system), and transition to operations. The Ground Segment will operate from three sites: the NOAA Satellite Operations Facility (NSOF) in Suitland, MD will house the primary Mission Management (MM), Product Generation (PG), Product Distribution (PD), and Enterprise Management (EM) functions; the Wallops Command and Data Acquisition Station (WCDAS) will provide space communications services and selected Ground Segment functions; a geographically separate Backup facility will be located in Fairmont, WV. The Backup will have visibility to all operational and on-orbit spare satellites, and it will be concurrently and remotely operated from the NSOF. EM will be used to monitor and control all Ground Segment components at all locations. The Government will operate the Ground

Segment.

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The GOES Series R, which will replace the GOES N-series, is required to sustain GOES capabilities through 2038; i.e., to close the GOES mission performance gap. Replacement of the current GOES Ground Segment is required to support the large increase in spatial, spectral, and temporal resolution of the new GOES-R satellite-based instruments, resulting in a significant increase in raw data downlink rate, in processing requirements for product generation, and in throughput for distribution of the products to users. The Ground Segment will close the Weather and Water (WWX) and Space Weather (SW) Products and Warnings capability gap, described as: "unable to provide forecasting services and cannot meet customer requests for operational and situational forecasts." By closing this gap, the Nation will be better prepared to mitigate the effects of climate and weather extremes. If the GOES Series R Program is not fully funded, the program will not meet the customer requests for operational and situational forecasting and will be unable to provide forecasting services required to prepare and mitigate effects of climate and weather extremes affecting the Nation.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

Completed reviews of the Development Contractors for Core Ground Segment, Antenna System, GOES-R Access System (GAS), and CLASS Integrated Baseline Review (IBR), System Requirements Review (SRR), System Definition Review (SDR), and a GOES-R Program Mission SRR and SDR; Completed 80% & 100% maturity baseline algorithm theoretical basis documents (ATBD); and over 100 Contract Data Requirements Documents; Negotiated Concept of Operations with Operator Stakeholders; Awarded an Independent Verification and Validation effort to NASA Ames Research Center.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Complete reviews of the Development Contractors for Core Ground Segment, Antenna System, and GOES-R Access System Preliminary Design Reviews, GOES-R Program Mission PDR, Core Ground Segment, Antenna System , GOES-R Access System and CLASS Critical Design Reviews (CDR) and GOES-R Program Mission CDR. Complete 80% & 100% maturity option 2 algorithm theoretical basis documents (ATBD); and Contract Data Requirements Documents. Begin construction of Antenna Stations at WCDAS, and Complete construction of Antenna Stations at the RBU and NSOF.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and**

Contract Specialist must be Government Employees.

2010-04-29

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$0.0	$0.0	$0.0	$0.0
DME (Excluding Planning) Costs:	$390.8	$213.3	$254.1	$243.3
DME (Including Planning) Govt. FTEs:	$6.2	$2.4	$3.0	$3.1
Sub-Total DME (Including Govt. FTE):	$397.0	$215.7	$257.1	$246.4
O & M Costs:	$0.0	$0.0	$0.0	$0.0
O & M Govt. FTEs:	$0.0	$0.0	$0.0	$0.0
Sub-Total O & M Costs (Including Govt. FTE):	0	0	0	0
Total Cost (Including Govt. FTE):	$397.0	$215.7	$257.1	$246.4
Total Govt. FTE costs:	$6.2	$2.4	$3.0	$3.1
# of FTE rep by costs:	41	16	16	16
Total change from prior year final President's Budget ($)		$-165.4	$-94.0	
Total change from prior year final President's Budget (%)		-43.40%	-26.80%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

The program revised the FY12 and FY13 spending estimates based on the FY11 enacted budget.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	1330	DOCDG133E09CN0094									
Awarded	1330	DOCDG133E10CN0229									
Awarded	4735	GST0110BK0047	GS06F0654Z	4735							

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:
The Telecommunications acquisition will be for telecommunications services only; e.g., using the Networx contract. The Antenna System Contract was procured using a mixed CPAF and FFP type contract. EVM is required only for the CPAF portion of the Antenna System Contract.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-07-30

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
3215D07001	GOES-R Project Office Support	GOES-R Project Office Support encompasses all government FTEs and contractor WYEs supporting GOES-R Ground Segment Project.			
3215D07002	GOES-R Core Ground Segment	The Core Ground Segment project is to: 1) design, develop, integrate and test an end-to-end GOES-R Ground Segment; 2) ssemble, integrate, and test the end-to-end Ground Segment, Space Segment, and User Interfaces, including transition of all systems to operations; and 3) provide operational support to the GOES-R Ground Segment operations to meet user requirements.			
3215D07003	GOES-R CLASS Archive	GOES-R CLASS archive system provides repository for GOES-R data for end user access.			
3215D07004	GOES-R Algorithm Working Group	GOES-R Algorith Working Group provides algorithm theoretical basis documents and validation testing for GOES-R products.			

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
3215D07005	GOES-R Facility Upgrades	Upgrade RBU, NSOF, and WCDAS in support of GOES-R Program.			
3215D10005	GOES-R Antenna System	GOES-R Antenna System consists of six new antenna stations (3 at WCDAS and 3 at RBU), as well as upgrades to four antenna at NSOF.			
3215D10006	GOES-R Access Subsystem	GOES-R Access Subsystem provides product distribution and access functionality for GOES-R data.			
3215D12007	GOES-R Telecommunications	GOES-R Telecommunications provides telecommunication networks for the GOES-R Program.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
3215D07001	GOES-R Project Office Support							
3215D07002	GOES-R Core Ground Segment							
3215D07003	GOES-R CLASS Archive							
3215D07004	GOES-R Algorithm Working Group							
3215D07005	GOES-R Facility Upgrades							
3215D10005	GOES-R Antenna System							
3215D10006	GOES-R Access Subsystem							

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
3215D12007	GOES-R Telecommunications							

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
3215D07002	Procure Development Environment	Development environment	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07005	RBU Upgrade Design	RBU Upgrade Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07005	NSOF Upgrade	NSOF Facility Upgrade Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07003	CLASS Requirements/System Design	CLASS Development and Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D10005	GOES-R Access System	GAS Requirements and System Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07001	GS Project Office Support	FY11 Project Office Support	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D10006	GOES-R Access System	GAS Requirements and System Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07004	Algorithm Theoretical Basis Documents	100% Option 2 Delivery	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07005	WCDAS Facility Upgrade	WCDAS Facility Upgrade Design	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D10005	CDR Preparation	CDR Preparation	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D07002	Continue replan efforts on CBB Approach	Replan proposal	2011-09-30	2011-09-30	2011-09-30	91	0	0.00%
3215D10005	CDR	Critical Design Review	2011-12-30	2011-12-30	2011-12-30	88	0	0.00%
3215D07002	Element Critical Design Reviews	Element Critical Design Reviews	2012-03-30	2012-03-30	2012-03-30	181	0	0.00%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
3215D07005	RBU Upgrade Construction Phase 1	RBU Upgrade Construction Phase 1	2012-03-30	2012-03-30	2012-03-30	179	0	0.00%
3215D07005	NSOF Upgrade Construction Phase 1	NSOF Facility Upgrade Construction Phase 1	2012-03-30	2012-04-30	2012-04-30	179	-31	-17.32%
3215D07003	CLASS Critical Design Review	CLASS Critical Design Review	2012-03-30	2012-05-18	2012-05-31	181	-62	-34.25%
3215D10005	Critical Design Review	GAS Critical Design Review	2012-03-30	2012-03-30	2012-03-30	181	0	0.00%
3215D07005	WCDAS Facility Upgrade Construction Phase 1	WCDAS Facility Upgrade Construction Phase 1	2012-03-30	2012-03-30	2012-03-30	179	0	0.00%
3215D07001	FY12 Qtr1 & Qtr2 GS Project Office Support	1st & 2nd Qtr of FY12 Project Office Support	2012-03-30	2012-03-30	2012-03-30	181	0	0.00%
3215D10006	Critical Design Review	GAS Critical Design Review	2012-03-30	2012-03-30	2012-03-30	181	0	0.00%
3215D07004	ATBD Validation CUTRs	ATBD Testing and Analysis	2012-03-30	2012-03-30	2012-03-30	181	0	0.00%
3215D07003	Integration and Test Phase 1	Integration and Test Phase 1	2012-05-30	2012-05-30	2012-05-30	181	0	0.00%
3215D10005	WCDAS Site	WCDAS Site SIR	2012-06-30	2012-06-30	2012-06-30	89	0	0.00%
3215D10005	RBU Site	RBU SIR	2012-06-30	2012-06-30	2012-06-30	89	0	0.00%
3215D07002	Core GS Critical Design Review	Core GS Critical Design Review	2012-06-30	2012-06-30	2012-06-30	89	0	0.00%
3215D10005	NSOF Site	NSOF SIR	2012-06-30	2012-06-30	2012-06-30	180	0	0.00%
3215D07005	RBU Upgrade Construction Phase 2	RBU Upgrade Construction Phase 2	2012-09-28	2012-09-28		179	0	0.00%
3215D07005	NSOF Upgrade Construction Phase 2	NSOF Facility Upgrade Construction Phase 2	2012-09-28	2012-09-28		179	0	0.00%
3215D07005	WCDAS Facility Upgrade Construction Phase 2	WCDAS Facility Upgrade Construction Phase 2	2012-09-28	2012-09-28		179	0	0.00%
3215D07001	FY12 Qtr3 & Qtr4 GS Project Office Support	3rd & 4th Qtr FY12 Project Office Support	2012-09-28	2012-09-28		179	0	0.00%

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
3215D07002	Prototype MM Release	Mission Management Release Prototype	2012-09-30	2012-09-30		91	0	0.00%
3215D10005	Antenna Installation	Antenna Installation	2012-09-30	2012-09-30		90	0	0.00%
3215D10005	Integration and Test	GAS Integration and Test	2012-09-30	2012-09-30		181	0	0.00%
3215D07003	Integration and Test Phase 2	Integration and Test Phase 2	2012-09-30	2012-09-30		121	0	0.00%
3215D10006	Integration and Test	GAS Integration and Test	2012-09-30	2012-09-30		181	0	0.00%
3215D07004	ATBD 100% Delivery	Validation of ATBDs	2012-09-30	2012-09-30		181	0	0.00%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
NONE								